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ORIGINAL ARTICLES.

Mercury.

By W.W. COCHRANE, M.D., ATCHISON, KAS.

From the medical writers of the present day it may be easily gleaned that the medical profession has lost prestige; that it does not maintain the position it formerly did with the community as a dignified and learned body. As evidence of its deplorable condition may be cited the sedulous efforts in soliciting aid from the nation and state to relieve them of the destructive influence of the parasite so prevalent—the quack. Statute law is essential to prevent crime, but it has but little force in reforming social or professional corporations. Whatever improvements or radical changes are brought about in such bodies must be from varying habits or conventional custom. It can but be evident to the candid investigator that the low ebb of the profession in the estimation of the members of communities has been brought about by unjust defamation, or it would in this iconoclastic age have been exterminated. So great has been the means of competence offered by the practice that some have left it to join the reformed, but those who have failed from dishonesty or imbecility. The reformer usually loses his balance and finding it difficult to create a sensation by giving facts, resort to exaggeration until he finally indulges in vagaries and falsehood. For a long period the homeopathist, hydropathist, and recently the Christian healers have industriously exerted their forte in criticism and have sedulously proclaimed the necessity of change or reform in the practice of the regular profession, until they have not only built up a lucrative practice for themselves but they havs succeeded by subtle misrepresentation in reducing the profession, at least in the estimation of the ignorant portion of communities, to a lower degree of eminence than it formerly held. They have influenced our legislatures to the extent of preventing the enactment of a just and popular law that all intelligent citizens deem imperative for the protection of the unfortunate invalids of the state. In order to counteract the pernicious influences of these toxic parasites it would seem to be essential that united effort be exercised to destroy their influence or they will continue to slander and injure us. To enable the profession to regain their former position and maintain a desirable patronage it would seem to be imperative that its members, individually and collectively, do something to appease the dissatisfied community. The paramount apothegm or inculcation in regular medicine is the imperative necessity of discovering and removing the cause of any malady. Many years ago Dr. S. D. Gross taught the theory that in all diseases there is inflammation and that the only cure for this was the anti-phlogistric treatment. Subsequently Dr. Taylor refuted this theory and clearly proved the superior efficacy of the stimulant or restorative practice. At the present time no scientific teacher would venture to deny that the latter theory was superior to the former. The once popular anti-phlogistic theory as a therapeutic measure is now considered one of the many exploded fallacies of a past age. The lancet having exerted its influence in detracting from the name of the profession has long since been abolished. These two medicaments, so potent as weapons in the hands of our calumniators, have been wrested from

their remorseless grasp by change and oblivion. We have but to look to the third means they have used so persistently that they have made it the most effective of the three in their tirade against us. Mercury has been the bete noir of the profession. For many years the populace have been made acquainted with its uses as well as its abuses in the practice, and a large number of them have repudiated it as a medical remedy, believing it to be useless and dangerous to both health and life. It is surprising that notwithstanding the tirade made against it by the reformers and the objections by the credulous members of the community that the text books and teachers should still continue to advise its use, and practitioners prescribe it to the extent that compels them to bear the name of Calomel Doctors, in contradistinction to the many medical pretenders. Many experiments of the most scientific character have been elaborately conducted by the most competent and trustworthy investigators of the times and they have without exception proven beyond a question that this mysterious, deleterious and potent medicament can claim or is entitled to but one medical property ascribed to it by its advocates, which is that it is a cathartic or purgative. That it has any other thereapeutic action other than that of a poison has been repeatedly denied and no logical or credible evidence has at any time been given to prove the reverse of the numerous statements. That there is nearly a universal prejudice existing against its promiscuous use there is no doubt whatever. Surely no regular practitioner would have the temerity to assert that he could not succeed without it or that its abandonment would increase the mortality in any known disease. The ceasing to prescribe it in any shape as a remedy would disarm detractors and give regular physicians many patrons who now employ pretenders only because of their fear of the strong medicine given by the Calomel Doctor. The rapid increase of the Homeopaths, Christian Healers, Osteopaths, health resorts and patent medicine takers, is plausible evidence of the degeneracy of the Allopathic practice. The four years schooling, health boards and specialists have given some relief, but they seem to have been inadequate to satisfy the complainants, as is indicated by their efforts to secure a medical law. Orators and writers are eloquent in their advice and call for unity of action in the premises. Ex-President Cleveland recommends the entering and controlling politics in the legislature. Dr. Hughes urgently suggests a national bureau of medicine and a seat in the cabinet of a medical man. Dr. Puriton wisely proposes that a committee from the state society be empowered to employ legal assistance to influence legislative and municipal action.

The experience of fifty years of practice strictly in accordance with the Allopathic theory, without the use of mercury, justifies me in deciding that it is comparatively useless, if not pernicious, and that its abandonment by the profession would tend to disarm the enemy and do much toward removing the prejudices of the community.

Fractures of the Elbow Joint and Their Treatment.

By W. T. WILLIAMS, M.D., MT. CARMEL, PA.

Read before the Schuylkill County Medical Meeting, Sept. 7, 1897. Official report.

Fractures in and about the elbow joint are of special interest because of their frequency, and because of the difficulties experienced in treating them successfully. I know of no class of cases that require greater surgical skill to diagnose and properly reduce than these. Nor do I know of any cases that worry the surgeon more lest an ankylosed joint and consequent impairment of the usefulness of the arm should be the untoward result of his treatment. It follows, therefore, that study of this subject should be of great interest to us all.

Fractures in the vicinity of the elbow joint may occur through any of the osseous prominences in this situation. Frequently they are complicated with dislocation, severe contusion, injury of the joint, or perhaps with comminution of the bones, and considerable

laceration of the soft parts covering them. In the majority of cases swelling comes on rapidly, tending to obscure materially the nature of the injury. These fractures may be briefly classified as separation of the lower epiphysis of the humerus, by no means an infrequent accident in children. Transverse fracture of the lower end of the humerus, immediately above the condyles, the bone here being very thin in its antero-posterior direction. Fractures of either condyle of the humerus: These are of a more serious character, being attended with more or less inflammation of the joint, and therefore usually followed by some impairment of the joint. The same can be said of fractures of the olecranon. Fracture of the coronoid process of the ulna, and of the neck of the radius occurs in connection with the more severe injuries of the elbow joint.

Cause and Frequency—Falls on elbow bent; direct injury to the parts by blows; contusion between car bumpers.

Next to Colle's fractures I have found these the most frequent, the majority of cases being boys between the ages of four and eighteen years. Fractures of the internal condyle are most common, those of the olecranon being in my experience very rare, having met with but two uncomplicated cases.

Diagnosis—The anatomy of the elbow joint should be well understood, as this is the key to the successful diagnosis and treatment. It is especially necessary that a correct diagnosis be made. As an auxiliary to this we believe that the use of an anesthetic is invaluable, procuring a perfect relaxation in so far as the volition of the patient is concerned; even then the diagnosis is no easy task, for usually before you see the case sufficient time has elapsed to permit extensive swelling. It is no uncommon thing to see elbows swollen quite large, the bony prominences covered by congested and contused tissue. It is here where the rub comes in to determine just what is the real condition. There may be a fracture of the humerus, ulna, or radius, or of more than one of these bones. There may be a dislocation associated with fracture, or there may be alone a dislocation. Now when fracture, either singly or associated with dislocation is present, it is no easy task to determine what is the true condition of affairs. If we were positive of a dislocation only, our duty would be to reduce it at once, because of the danger of causing a stiff joint. In case we are certain a fracture is present we need not be in a special hurry to set it, unless the fragments are very much displaced, because no callus will begin to form for about ten days, and we could properly wait a few days until the swelling subsides before making our diagnosis as to the nature of the fracture and setting it. As we must, therefore, often be in doubt as to the exact conditions because of the swelling, and as an immediate diagnosis is essential in order to obtain good results, it follows that any advice that enables us to do this is of the greatest value.

Dr. Dawbarn, of New York, has recently suggested that under the circumstances just related, an Ensmarch bandage be encircled firmly around the affected arm, extending from hand to arm-pit, and left there for about fifteen minutes, removing the bandage except the final few turns which still encircle the arm tightly. The elbow is now pale and bloodless, and no longer swollen. The congestion and edema are, for the time being, gone. The diagnosis can now be readily made, and whether a fracture or dislocation be present the proper treatment can be applied with a degree of accuracy heretofore impossible.

I have tried this method in a recent case, and can testify to its practical utility. Another practical point in these cases is to bare both arms, and compare them in the fully extended position on account of the fact that the line of divergence of the forearm is not the same in all individuals. In obscure cases the use of the X-rays would be an invaluable aid. This is beautifully demonstrated in the pictures which I will have the pleasure of showing you later on.

Treatment—The diverse views held concerning the treatment of these fractures, is an indication of the unsettled condition in which the surgeon's mind is placed when called upon to treat an injury of the elbow

joint.

Not long ago Dr. John B. Roberts, of Philadelphia, sent inquiries to the surgical societies of New York, Boston and Philadelphia, regarding whether flexion or extension is best in treating these fractures. These replies were printed in the *Annals of Surgery*. A majority recommended the semiflexed position. A minority, but containing famous men, counselled extension, with supination maintained during the time of healing. The exponents of either method of dressing have adduced ingenious arguments based upon careful and scientific dissection of the cadaver, arriving at dimetrically opposite conclusions, each claiming for the respective positions advocated better adaptation of the fragments.

It seems to me that any investigation that does not consider the important part played in the production of deformity by the elasticity and contractility of tissues during life is misleading. Given equal advantages for the semiflexed and extended positions in the treatment of these fractures as to adaptation and retention of fragments, it would seem that the semiflexed position offers the added advantage of less interference with circulation, and greater freedom from muscular spasm with consequent comfort to the patient. This position is the most easy and natural one for the limb on acccount of the anatomical structure. Therefore I follow Prof. Hamilton's advice, and use an angular splint in nearly all ordinary cases of fracture of the elbow joint. There are cases, however, in which the straight splint is indicated, and better results are obtained by treating fractures of the internal condyle and olecranon in the extended position.

It seems to me that whereas in the ordinary case with no great displacement upward of the condylar and trochlear fragments, the semiflexed position is the best one. When, on the other hand, we meet with an instance of the worse, or "gun-stock deformity" class of cases, we cannot do better than to adopt a combination of both positions, using for the first week extension and then assuming the semiflexed position during the remainder of the time required.

This method I have used in two cases with satisfactory results. By this plan the certainity of preventing gun-stock deformity is first secured, and then later on the usual bent position adopted to make sure of the most useful position in the unfortunate event of an ankylosed joint.

There are fractures of the lower end of the humerus when treatment in the extended position will not relieve the displacement of the fractured end. This is beautifully shown by the accompanying X-rays (skiagraph) picture, for which I am indebted to Drs. Starbuck and Scattergood of the Pennsylvania Hospital. This case was treated in the position of extreme (or acute) flexion —a position recommended by Dr. Jones, of Birmingham, England. The boy was aged 12 years. The fracture was one inch from lower end of left humerus. These pictures demonstrate beautifully the position before and after treatment. I am favorably impressed with the ease with which this fracture was kept in position, and it seems to me we could often use this position with advantge.

Regarding splint material, there is also a great diversity of opinion as to the kind of material to use for splints. Much has been written regarding the advantage of manufactured splints; these I long ago abandoned and now use plaster of Paris almost altogether. My reason is that if it be properly applied the fracture is controlled in a few minutes, whereas in the use of material like pasteboard, leather, or sodium silicate, the fragments may become displaced before the splint has hardened, thus conducing to a bad result. A properly applied plaster of Paris dressing will fulfil all the indications, and take the place of all other splints.

Regarding the important question of passive motion, there has been a radical change of opinion within recent times. I well remember when I graduated, and for many years subsequent, the orthodox doctrine was taught that in fractures close to, or involving a joint, it was the duty of the surgeon to use very early and frequent passive motion in order to avoid bony ankylosis. At the present time comparatively few men of

prominence hold to this view, and the majority are of the opinion that motion, either active or passive, during the knitting process is prejudicial to the best results. Allis, Powers, Roberts, and others, have demonstrated by systematic observation and carefully prepared statistics, the advantages of continued fixation in the management of these cases until union has been completed, not only as preserving the most useful and least deformed arms, but doing this with the minimum of pain and discomfort to the patient. Their is evident skepticism as to the value of this method, but the results reported seem to justify the opinion that immobilization produces the best results.

The arguments in favor of continued fixation are briefly these: A cardinal principle in surgery is rest—absolute quietude for an injured part. If in other conditions of joint inflammations absolute rest and consequent freedom from irritation be the accepted treatment, why should not the same principle be maintained in joint fractures? It is not possible to move a joint without moving the broken fragments, and if the fragments are thus moved instead of being put at rest, they are thereby subjected to irritation. Increased irritation causes increased exudation of callus. The greater the amount of callus thrown out the more new bone resulting; the greater new bone produced about the broken ends, the more will be the bony obstruction to free motion in the joint. When we have, therefore, made sure that the fracture is properly "set," we now avoid all movement of the joint until the exudation of callus comes to an end, and bony union is fairly under way.

On several occasions I have removed the dressing a little early in order to produce passive motion, and I have noticed afterward some reinfiltration swelling and pain, conditions which were immediately relieved by refixation for a period of a week or two. I know it requires some little courage for a surgeon trained in the former idea to delay one month before beginning movements of the affected joint, but there is no question in my mind that the present results are better than they were under the old plan of treatment. When, finally, we do move the joint, stiffness and pain will, of course, be observed, but motion must be very gentle, and should be both active and passive, increasing day by day in extent, and accompanied with massage by the lubricated hands. If, after two weeks of this treatment a fairly normal range of flexion and extension has not yet been obtained, we may here, as is occasionally done in rheumatism, give a brief anesthetic, and break up the adhesions of synovial surfaces which will probably be the cause. This will commonly not have to be done, and there is to-day distinctly less danger of bony obstruction to the normal freedom of the joint than was once the case under the practice of early passive motion.

Appendicitis and Life Insurance.

Wm. B. Van Lennep, A.M., M.D., in Clinical Reporter.

In this connection I have taken pains to inform myself of the conclusions arrived at by the business men who deal financially with our chances of living—the life insurance people. After inquiring into the instructions given to their examiners by a number of these companies, I quote from one which is probably the most comprehensive and at the same time the most conservative. After primary attacks without peri-appendiceal suppuration, where the appendix was not removed, more than 90 per cent. are found to recur within two years, and the advice is given to accept the 10 per cent. "risk" after this time. In those of chronic relapsing appendicitis, at least three years must elapse after an attack, with the decision by the examiner that the appendix had become obliterated (?). In cases of irregularly recurring appendicitis, the question is raised whether they should be accepted at all, and five years of immunity are required before they become insurable. With applicants, by contrast, who have been operated, one year, and by some six months, are allowed for the development of hernia when a clean excision has been made, while the time-penalty and the rigidity of the examination are increased according to the incompleteness of the operation and the co-existing complications.

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Topeka, Kansas, Saturday, Oct. 23, 1897.

THE following notice clipped from a Kansas exchange is interesting as a straw showing the current of public opinion. But what will the purists in the American Medical Association say about it?—*Ex.*

"JOINT COMMITTEE MEETING.

"HADDAM, KAS., Sept. 10, 1897.

"*Editor Kansas Medical Journal:* Tuesday, Sept. 28, 2 P. M., at office of secretary of state board of health, there will be a joint meeting of the committees appointed by the state homeopathic, eclectic, and regular societies, for the purpose of arranging a program for a joint session of the three state medical societies, and to transact such other business as will serve the interests of the medical profession of the state in common. I earnestly request a full attendance of the members of the regular committee.

"H. M. OCHILTREE,
"Chairman Regular Committee."

There was certainly nothing in the meeting of this committee nor in the plan proposed that should startle the most fanatical purist in the American Medical Association. It is hoped that by a joint meeting of the three societies two objects may be attained —one most serious to the pockets of the members, the other most dear to their hearts. We had failed for a number of years to secure enough paid fares to the society meetings to convince the railroads that they could afford to give us an excursion rate. The condition was due, not to lack of attendance, but to the fact that about one-half of those in attendance were railroad surgeons and ride on passes. It is hoped that with the combined forces of the three societies there will be no question of a cheap rate.

It is not proposed to have a joint meeting except for one evening, when the subject of medical legislation will be discussed and some plan adopted, which can be agreed upon by all schools, for securing the adoption of a medical law by the next legislature.

Acute Malarial Fever.

The germ which produces malarial fever is known as plasmodium malaria, and is indigenous to the soil of every clime and country. Moisture and certain temperatures are necessary to its development. This microbe probably enters the circulation through the lungs, and sets up fermentative and putrefactive changes in the blood. Its presence produces alterations in the secretions and excretions. The microbes live, multiply and die in the red blood corpuscles, therefore the disease is not contagious.

The first symptom is depression of the brain and nervous system. As the microbes multiply in the corpuscles they break them up and liberate their hæmoglobin, which is carried to the liver, spleen, skin and other organs, where it is deposited as pigment. When the increase of microbes is rapid the symptoms of depression and reaction are intensified. the profundity of the depression,

or chill, depending directly upon the rapidity of the multiplication. The subsequent reaction, or fever, is caused by the formation, in the tissues of the body, of an antitoxine to destroy these germs. The fever is Nature's method of ridding the system of the poison formed by the germs, or of the germs themselves which act as a foreign element in the blood. Nature arouses herself, every cell increases its action, and an antitoxine is formed to meet the enemy.

The germs are mostly destroyed in this way. Unfortunately they are not all destroyed. The survivors again multiply and, if virulent, within twenty-four hours have so renewed their forces as to make another attack; produce another chill. This may occur once each day, or once in two, three or four days. The more malignant the germs the shorter will be the interval between the recurrences. There are three stages in each attack: the chill, the fever, and the sweat.

The temperature commences to rise before the chill begins, and there are changes in the urine. From the beginning of the rise in temperature there is an increased amount of urea, also an increase in the quantity of urine. The real onset of the disease begins with the increase of urea in urine, giving it a clear, watery appearance. This occurs about two hours before the chill. There is more or less vasomotor disturbance, and, as the disease progresses, there is constriction of the surface vessels, which drives the blood to the central organs and engorges them. This is the period of chill, and lasts from a few minutes to a half hour, when the reaction comes, and the surface vessels dilate and become overfilled with blood. This is the fever stage. Finally these distended vessels are relieved of their tension through sweating. An interval of several hours follows, in which the patient feels that he is well.

To relieve the liver, spleen and other organs of the deposited pigment, use the following: Calomel, three grains; bicarbonate of soda, twelve grains; sugar of milk, twelve grains; mix and divide into twelve powders, and give one every hour until the bowels move freely.

Both as a germicide and a support to the nervous system quinine is the remedy. It should be taken in three-grain doses every three hours, in coffee or in coated pills. Children take it best in yerva santa. This treatment should be continued until all the symptoms have subsided. To do its best work the quinine should be given six hours before the time for the recurrence of the chill. It should not be given during the chill or fever, as at those stages there is already too much tension in the blood vessels, and rupture might result from the stimulation. It can be given with perfect safety, either before the chill or during the sweating. If there be great pain or an accompanying diarrhœa, mix with the quinine from one-sixteenth to one-eighth of a grain of morphia. If, when the urine first begins to increase, we give one-fourth of a grain of pilocarpin by the mouth, or one-fifth of a grain hypodermically, we will anticipate and prevent the recurrence of the chill and fever, and tide the patient over to the sweating stage.

Headland's theory of this disease assumes lack of taurine in the blood to be the cause of the disorder. Taurine, is an element of the bile, liberated by the liver and reabsorbed by the intestines. It is identical with quinine in principle. When found in the bile and blood there is immunity from periodic diseases, but when it is lacking there is general debility, loss of appetite, anæmia, and malaria. By their stimulating effects upon the liver, calomel and quinine replace taurine, hence restore to health.

Whether this or the germ theory be true, the treatment is exactly the same in both, so it matters little which is believed. It is probable, however, that both are correct; that the taurine, always present in vigorous health, destroys the germs as fast as they enter the circulation until—from some interference, as improper diet, congestion from cold, or other cause—the liver is rendered incapable of doing all its work, and no longer secretes taurine in normal amount. This reduces the system to a susceptible condition, and the germs, now finding the blood a favorable medium, quickly multiply and work the mischief.

Combined Medical Meeting.

The committees on joint session meeting appointed by the different schools met together Tuesday, Sept. 28, 1897, at the Copeland hotel.

The meeting was called to order, and Dr. E. B. Packer, of Osage City, made chairman, and Dr. A. M. Hutchinson, of Hutchinson, secretary.

A roll call showed the following physicians present:

Kansas Medical Society.—H. M. Ochiltree, Haddam; J. W. May, Kansas City; John E. Minney, Topeka; Ida C. Barnes, Topeka; L. A. Buck, Peabody.

Eclectic Medical Society.—E. B. Packer, Osage City; D. T. Long, Topeka; W. C. Hamilton, Topeka; T. N. Watts, Alma; E. M. Hoover, Halstead.

Homeopathic Medical Society.—A. M. Hutchinson, Hutchinson; L. T. Ryder, North Topeka; C. F. Menninger and C. H. Lowry, Topeka, and J. W. Jenney, Salina.

The chairman stated that the object of the call was to arrange for a combined meeting of the three state societies at the next annual meeting of each, giving as a reason that better rates of transportation could be obtained when all met at the same time and place; that matters pertaining to medical legislation and kindred subjects in which all were equally interested could be discussed, and a more fraternal spirit among the members of the profession be engendered.

After lengthy discussion it was decided that each society would call its next annual meeting at Topeka, on the first Wednesday, Thursday and Friday of May, 1898. That the societies hold their meetings in separate halls, but that Wednesday evening the three societies meet together in the same room, with the following program:

Chairman, E. B. Packer, President of Eclectic Medical Society.

Secretary, A. M. Hutchinson, President of Homeopathic Medical Society.

Music, by selected choir.

Invocation, by some resident clergyman.

Address of welcome to the three societies, by the governor, mayor, or some suitable person.

Response to address of welcome, by Dr. H. M. Ochiltree.

Paper, "Medical Legislation," by some representative of the Kansas Medical Society.

Paper, "Medical Supervision of the Public Schools," by some representative of the Homeopathic Medical Society.

Paper, "The Relation of Disease to Crime," by some representative of the Eclectic Medical Society.

These papers to be read without discussion, the meeting to close with a general social and reception.

The local committee, in whose charge all the details were left, are Drs. R. S. Magee, C. F. Menninger, and D. T. Long.

A. M. HUTCHINSON,
Secretary of Committee.

Auscultation of the Tuning-Fork Notes.

Malina, in Wiener med. Wochenschrift.

The vibrating tuning-fork is placed on different parts of the chest anteriorly, and auscultation practiced on a corresponding locality posteriorly, first during quiet, later during forced respiration; further, from time to time the patient is instructed to "hold his breath." Variations in the tuning-fork notes, both in intensity and tone, will be noticed. The former are better noted as they are easier of appreciation. Normally the note is weaker during inspiration, because of the presence of more air between the tuning-fork and the auscultating ear. This is of diagnostic importance, as there occur conditions associated with which there is little or no change in the quantity of air in the whole or part of a lung; and that part of a lung respires less can thus be more readily determined than in any other way. In tuberculosis of the apex of one lung one will notice during inspiration much less change than upon the healthy side, and thus a diagnosis may be

made before any other physical signs are present. So also in pneumonia, there occurs little change (compared with the healthy side), and during the stage of infiltration at least it may be louder. Under such circumstances these changes are especially noticeable, as the unaffected side breathes more than normally, and gives rise to greater diminution of the note during inspiration. Thus he diagnosed two cases of central pneumonia, impossible of detection by other means of investigation. Cavities also increase the loudness of the note. It is diminished in emphysema and over pleural exudates. In the latter instance one can readily tell when the compressed lung begins again to respire. By auscultation of the tone on the head, one can tell when blood or pus replaces air in the frontal sinuses, etc. May also determine bone sensibility. A patient with hysteria and hemianesthesia was able to appreciate the vibrations as soon as the tuning-fork was placed on bone (almost!), as patella, tibia, etc. If the vibrating tuning-fork be placed on the patella, and auscultation practiced on the tibia, the note will be found much diminished (compared to healthy side) if the joint be filled with an exudate.

Clinical Forms of Diphtheria and Diphtheritic Anginas.

Medical Review.

O. Vierodt (*Berl. Klin. Woch.; Pediatrics*) said that the bacillus of diphtheria is found not only in the membranous anginas, as is well known, but also in other varieties. In a certain percentage of these cases, under the circumstances which admit of no doubt as to the role it plays as the excitor of this form of angina, it is for us to determine whether or not these non-membranous bacillary anginas are of great consequence, and how they may be differentiated from the benign forms. On the other hand there exists besides the diphtheroid of scarlet fever other forms of anginas which resemble diphtheria, but which are not due to the specific bacilli and, therefore, are benign. He restricted his communication to those non-membranous anginas, caused by the Loeffler bacillus, and further to those forms of angina which have a diphtheroid appearance, but in which the Loeffler bacillus is absent.

I. AFFECTIONS OF THE PHARYNX DUE TO BACILLI.—The findings in cases of undoubted membranous anginas, with the formation of a true membrane, extending over the border of the tonsil, will not here be considered. These forms only occasionally make the diagnosis difficult, in cases of scarlatinal diphtheroidal deposits.

Purely tonsillar membranous diphtheria, with the presence of bacilli, was found in the majority of cases, either as one large, firmly-adhering, whitish deposit, covering the whole surface of the tonsil, or as small, separate islet-like spots, which were wholly or in part situated on the prominent portion of the tonsil, presented the grayish-white color, and adhered either pretty firmly or, perhaps, somewhat loosely to the tonsillar tissue. On removal, or on the spontaneous shedding of such an insular deposit, a true whitish or yellowish lacunar plug not at all infrequently made its appearance. After the shedding of confluent deposits, which covered the whole surface of the tonsil, lacunar plugs also frequently presented, which were often of a yellowish-white color, in contradistinction to that of the removed deposit. After the removal of firmly adherent deposits the mucous membrane was found slightly bleeding, but not ulcerated.

Typical lacunar angina—that is, angina of the tonsils, accompanied by a yellowish or yellowish white conglomeration, having its seat deep down in the lacunæ, being easily expressed or drawn out and of a soft consistence—have not infrequently been met, accompanied by bacilli. All these cases are excluded in which lacunar plugs were present only as secondary deposits in well-marked diphtheria. At the same time, also, those cases of lacunar angina with bacilli present were excluded in which the latter might possibly be pseudo-diphtheritic bacilli, namely, non-virulent Loeffler bacilli. There yet remained eight cases of perfectly typical lacunar anginas caused by the Loef-

fler diphtheria bacillus. From these cases the conclusion was drawn that, not only in the beginning of a bacillary angina, but during its course as well, a typical lacunar tonsilitis may be present. It was impossible to distinguish these from the innocent affection frequently met with, either by the color or seat or consistence, nor even by the more or less firm adherence of the plugs. This picture was usually present in the beginning of the disease, for one to three days, and was then followed by a well-marked membranous diphtheritic deposit. Occasionally, however, it also occurred after the membrane had been shed. From two of the cases observed it was seen that a bacillary lacunar angina may remain purely lacunar during its whole course.

He has frequently observed lacunar props on tonsils slightly enlarged, from which were propagated, on the surface of the tonsil, globular lentil-sized, typical adherent diphtheritic membranes, like the flat heads of nails, reminding one of nail cultures; this similarity became more and more apparent when this membrane, resembling the head of a nail, was removed by the pinchers. Bacillary diphtheria, furthermore, occasionally begins when the tonsils are not yet swollen at their uppermost or lowest portion; in both cases the small portion of membrane lies quite deeply, even hidden. Finally, we may meet, in the anginas accompanying croup, with a hardly recognizable white, veil-like membrane.

Lastly, that form of angina which by some is designated as necrotic tonsilitis, and which frequently occurs unilaterally, may possibly be due to bacillary infection.

II. DIPHTHEROID WITH ABSENCE OF BACILLI.—About fifteen cases of a diphtheritic character without the growth of bacilli, leaving out scarlet fever, were observed. None of these extended to the nose or larynx, but the greater number passed beyond the tonsils in the direction of the soft palate or pharynx. Paralysis was never a sequel. Streptococci and staphylococci were found in some cases, and in one case a diplococcus. Among these forms the recurrent diphtheroid angina, with the absence of bacilli, was of particular diagnostic interest. There are persons, adults as well as children, who are subject to an annual attack of "sore-throat." Frequently these recurrent anginas take on the marked character of diphtheria, usually confined to the tonsils. In three cases, an exact bacteriological observation was made, and the absence of the bacillus of diphtheria demonstrated. It may be that we are dealing here, in an anatomical sense, with croup (Diphtheritis superficialis).

III. NECROTIC ANGINAS WITH THE PRESENCE OF STAPHYLOCOCCI.—The staphylococcus pyogenes was frequently found accompanying the Loeffler bacilli or the streptococci.

Paralysis After Mumps.

The Atlantic Medical Monthly,

L. Revilliod (*Rev. Med. de la Suisse Romande*) reports a case where, directly after an attack of mumps, a boy aged seven became paralyzed. Weakness of the legs was first noticed, and this was followed by dysphagia and rapid emaciation. The legs could be slightly moved, but he could not stand. There was left facial paralysis. Both eyes could be shut together, but the left not alone. The tongue could be scarcely protruded as far as the lips, and deviated to the right, but there was no atrophy. The movements of the palate were sluggish. Swallowing was almost impossible, and liquids swallowed brought on a paralytic cough, so that the feeding with the tube was necessary. Respiration was labored and sighing. All four limbs were equally affected. The sphincters, special senses, general sensation, and the vasomotor system were intact. Faradic excitability of the left facial was diminished. Galvanism caused great pain, but no contraction. The cranial nerves involved were: the sixth on both sides, the left facial, the right hypoglossal, the external division of the spinal accessories to the neck and the internal (recurrent) branches.

Diagnosis: Infantile paralysis could be

excluded, and diphtheritic paralysis was thought probable, but all inquiries negatived this. There had been no case of diphtheria in the commune for five years; the boy's throat had been examined when the mumps began, and no signs of diphtheria were present; his brothers and sisters all had mumps about the same time. Under treatment (hypodermic injections of strychnine, massage, etc.) the boy rapidly improved, and was quite well in about six weeks. It is not surprising that mumps, being an acute specific disease should be followed by paralysis; nevertheless, only one other case has been reported.

Guaiacol in Puerperal Eclampsia.

J. F. R. Appleby, M. D., of Washington, D. C., in Boston Medical and Surgical Journal.

"When guiacol is poured upon the abdomen it is rapidly absorbed. Its physiological effect is to cause rapid and marked lessening of arterial blood-pressure, lowering of temperature, and free diaphoresis. These physiological effects first led me to use it in a case of nephritis attended with slight convulsions and a full, hard pulse. This patient was an adult male. Twenty-five drops were poured upon the abdomen, and rubbed in with the tips of the fingers. Relief was ceatainly marked.

"Next I used guaiacol in two cases of puerperal eclampsia, with surprising and happy results. They were primiparæ. In the first, labor was progressing favorably, dilatation had been accomplished, and the occiput had begun to descend, when convulsions came on, becoming more profound with each recurring seizure. As soon as practical, chloroform was administered, and the child, a large male, was delivered with the forceps. On the effect of the anesthetic wearing off, the convulsions returned; whereupon I poured forty or fifty drops of guaiacol (the case seemed too urgent to take time to count the drops) upon the abdomen, and gently rubbed them in, as in the preceding case. In a few minutes the pulse became soft, free diaphoresis set in, and the convulsions died away.

"The second patient had been delivered by a midwife. Both baby and placenta had come away when convulsions set in. On arriving at the bedside, I found that the patient was enormously swollen over the whole body, and the pulse was full, hard, and tumultuous. The convulsions were almost continuous. They were as powerful as, if not more powerful than, any I have seen in a practice extending over nearly thirty years. It looked like a hopeless case. As with the other patients, I used forty or fifty drops of guaiacol and gave a hypodermic injection of one-fourth of a grain of sulphate of morphia. In less than an hour the patient was sleeping quietly, and no more convulsions followed.

"Both of the above cases had albuminuria and were much swollen, which symptoms demanded treatment for a few days. Both made good recoveries, and are now enjoying ordinary health.

"For guaiacol there may be claimed certainty of action, speedy relief of urgent symptoms, and ease of application, which renders it, perhaps, more desirable and less objectionable than any of the remedies heretofore used in eclampsia. In neither case did I find it necessary to make a second application, but would certainly have done so had it been necessary."

The Specific Action of Quinine in Malaria.

Exchange.

Dr. E. C. Register, editor of the *Charlotte Medical Journal*, read a paper with this title before the North Carolina Medical Society.

After many years of study, both clinical and microscopical, the doctor arrived at the following conclusion in reference to the specific action of quinine in the continued forms of malarial fever. He says that a malarial fever without complications will subside after the plasmodia of malaria disappears from the blood; that we have in quinine the means to completely eradicate malarial poison from the body; that malarial fever oc-

curring in a previously healthy subject, and in the central United States, if at once recognized and properly treated, never ends in death; that it is speedily curable, never continues, provided the nature of the disease be recognized and appropriate treatment employed.

Dr. Register has made microscopical examinations of the blood of several hundred patients suffering with remittent malarial fever, and has studied closely and thoroughly the crescentic and ring-shaped bodies which he says are the forms of the parasite which is responsible for the continued types of this fever, and he finds that the reason quinine does not always affect these irregular forms of the poison is on account of the usual defects in its administration. He contends that the drug is very imperfectly absorbed when given by the stomach, and when the patient has a temperature of over 102 °. He says that in cases of continued malarial fever, if distinct and well-marked intermissions of the fever are produced artificially by the use of antipyrine, antifebrine, and phenacetine, the crescentic and ring-shaped bodies will disappear after the administration of quinine as quickly as the spherical bodies that are found in an ordinary case of intermittent fever. In reference to the belief that the forms of the parasite that inhabit the blood cells are not acted on by quinine, he says: "There is no doubt in my mind that this belief is not erroneous. Besides my own observations, I have been able to collect the opinions of thirty-two authors touching upon this point, and twenty-eight out of the thirty-two believe that the endoglobular or intra-corpuscular forms are not, on this account, the cause of an uncontrollable fever, and that its proximity to the blood cell does not, in any way, protect it from the action of quinine."

Germs in Butter.

Modern Medicine.

It is very generally known that milk furnishes an excellent medium for the growth of bacteria; but more important than this is the fact that, from its very general use, it affords one of the most dangerous vehicles for the dissemination of diseases. This undesirable property is also shared by butter. An appreciation af this fact should at least lead the consumer to investigate the origin and manner of preparation of the butter supplying his table.

According to recent researches, there were contained in one dram of butter (as much as the point of a knife would hold) 2,465,555 micro-organisms in that from the pat, and as many as 47,250,000 on the outside. Thus it is not exaggerating to state that the number of organisms swallowed in eating a moderately large piece of bread and butter would exceed the entire population of the Western hemisphere.

Butter may contain varieties of bacteria which are of themselves harmless as regards life; but, on the other hand, it often affords a convenient vehicle for conveying pathogenic germs, as those of typhoid fever, scarlet fever, measles, tuberculosis, etc. The first three may be obtained from contaminated water which has been used for cleansing purposes in the preparation of the butter, and the latter be derived from the milk of a tuberculous cow. Two other varieties of bacilli have been isolated and described, and were found to be constantly present in the butter.

Butter kept in a refrigerator showed a marked reduction of the number of bacteria; but the great majority of consumers of butter are without refrigerators or ice; hence during warm weather abundant opportunity is given for the growth of the germs. The danger may be somewhat obviated by boiling the butter; but as this renders it unpalatable, a better method is to sterilize the milk before the butter is made. Too little attention is given to this subject by sanitary authorities.

DOCTOR:—Your library is not complete without the *Hypnotic Magazine*. Cost of this handsome monthly, including premium book on "Suggestive Therapeutics" is only one dollar ($1.00) a year. THE PSYCHIC PUBLISHING CO., 56 Fifth avenue, Chicago.

Hydrozone for Disorders of the Genito-Urinary Tract.

Medical Times and Register.

Dr. John Aulde, of Philadelphia, states that about eight years ago he was forcibly impressed with the value of Peroxide of Hydrogen in a protracted case of gonorrhœa. The disease had persisted for three months despite the treatment of several attendants, there being a constant discharge, and in addition, there was an orchitis present, the left testicle being about as large as a baseball.

Treatment consisted of the local use of injections of equal parts of Peroxide of Hydrogen and moderately warm water, used at intervals of four hours, these injections being followed by a solution of arsenite of copper containing one milligram (one 65th grain) to the drachm, diluted with an equal quantity of hot water.

In a week the patient was able to return to his home in a distant State, the discharge from the urethra having entirely ceased, and pain and chordee having disappeared.

The author advised the same treatment for non-specific urethritis and gleet, but as Hydrozone is much stronger (two times) than the Peroxide, and perfectly harmless, he gives it the preference.

In vaginitis and vaginismus this treatment is of especial value. The treatment heretofore recommended by physicians, consisting of hot vaginal douches, either with or without some alkali, as sodium bicarbonate, followed by the injection of a small quantity of Peroxide of Hydrogen (medicinal) in warm or cold water is superseded by the single application of a hot solution of Hydrozone, one part in eight; the patient should use a fountain syringe which should be hung upon the wall about six feet from the floor; the patient sits upon a suitable vessel, and introduces the rubber tip of the hose well back into the vagina, while the labia are compressed by the disengaged hand; this allows the solution to so distend the vagina as to bring it in contact with all the diseased tissue. The injection should be repeated twice in twenty-four hours.

In uterine diseases, where the solution must be brought into contact with the endometrium, the following treatment is pursued:

The patient is placed in the dorsal position, with the hips well elevated; an ordinary dilator is employed to distend the cervix, so as to admit the nozzle of the syringe and permit the free egress of the injected fluid; (a suitable return flow tube can be used to better advantage, the Fritsche's douche is the best that can be used). The injection is then made, a liberal amount of the hot medicated solution being used.

There is no need of caution in chronic cases, that the effervescence which attends the destruction of the unhealthy tissue does not force some of the debris into the Fallopian tubes. This is best avoided by using a large quantity of the solution, and afterwards directing the patient to assume the upright position. The pressure thus brought to bear upon the uterus will cause the complete discharge of all debris.

A preliminary vaginal douche should always be taken, using the medicated solution, as otherwise, harm might ensue by the entrance into the uterus of the vaginal secretions. The author warns against the use of the vaginal douche if the cervix be patulous, as there is an almost certain danger of the infected vaginal debris being forced into the uterine cavity. To avoid this the vagina should be cleansed by the local use of the medicated solution through the speculum.

The author believes Hydrozone to be the best remedy for cystitis occurring either in the male or female. The bladder should be washed out with the solution (one to eight), a small quantity being used at first in chronic cases, owing to the painful muscular contractions following the withdrawal of the solution. The amount can be gradually increased. (A double current hard rubber catheter should always be used for that purpose). In gonorrhea, gleet and cystitis, the local treatment is oftentimes aided by the internal administration of hourly doses of calcium sulphide one-tenth of a grain.

In Children's Practice.

Dr. Goliner, of Erfurt, has recommended Papain, B. & S., in *Der Kinder-Arzt*, as exceptionally valuable in infantile dyspepsia and intestinal catarrh. He says: "I usually order 1½ grains Papain, B. & S., (for nursing infants), three times daily, with barley gruel and diluted milk fifteen minutes after each dose. After the third or fourth powder the infant's appetite increases, the spitting up or eructation ceases, ond the evacuations assume a normal yellow color—the previous fetid odor of the latter disappearing entirely, which is also proof of the antiseptic virtue of papain. For children over one year, I recommend a dosage of 3 to 4 grains Papain, B. & S. I have found it to be an excellent appetite-stimulating and digestion-promoting agent in children's practice."

"Grip."

C. A. Bryce, A. M., M. D., Richmond, Va., editor of *The Southern Clinic*, in writing upon the above subject, during an epidemic of la grippe, said:

"For the past four weeks or more, we have met with five times as much grip as anything else, and the number of cases in which the pulmonary and bronchial organs have been very slightly or not at all involved have been greater than we have noted in former invasions. On the contrary, grippal neuralgia, rheumatism, hepatitis and gastric congestions have been of far greater frequency, while in all the nervous system has been seriously depressed.

"The fatalities from pneumonia, meningitis and other complications have been fewer, showing plainly that we are gradually gaining an immunity from this zymotic invader. With each succeeding visitation of this trouble we have found it more and more necessary to watch out for the disease in disguise, and to treat these abnormal manifestations; consequently we have relied upon mild nervous sedatives, anodynes and heart sustainers rather than upon any specific line of treatment. Most cases will improve by being made to rest in bed and encourage action of skin and kidneys, with possibly minute doses of blue pill and quinine, or calomel and salol. We have found much benefit from the use of antikamnia and salol in the stage of pyrexia and muscular painfulness, and later on, when there was fever and bronchial cough and expectoration, from antikamnia and codeine. Throughout the attack, and after its intensity is over, the patient will require nerve and vascular tonics and reconstructives for some time."

Unconsciousness from Constipation.

Very stout women have suddenly become unconscious from long-continued constipation. A physician relates a case in which unconsciousness, with stertorous breathing in the night, simulated an apoplectic attack. By the aid of mustard to the feet and abdomen, with ice to the head, and a large enema of soap, water and castor oil, a large evacuation was procured, with speedy return to consciousness.

Young Fastkind—"I thought you told me this horse was without fault?" Stableman—"So Oi did, sor." Young Fastkind—"I notice one of his eyes is blind." Stableman—"That's not his fault, sor; it's his misfortune."

Co-operative Sanatorium.

An association has recently been organized at Vienna to erect a sanatorium for persons of moderate means, to which the physicians interested can send their patients and continue to treat them there personally. The charges for board at the institution will be no more than is required to cover the actual expenses.